

REMARKS

Support for the above-requested amendments to claim 1 is found throughout the specification, such as, for example, in paragraphs [0024]-[0026] and FIGS. 1a-1d. Support for the amendments to claim 5 is found at least in paragraphs [0021]-[0023]. Support for the amendments to claim 6 is found at least at paragraphs [0021] and [0029]. Claims 4, 5, and 15-17 have been amended to change the dependency of the claims. Claim 3 has been canceled without prejudice. Claims 2 and 20-46 were canceled without prejudice in previous Amendments. No question of new matter arises and entry of the amendments is respectfully requested.

Claims 1 and 4-19 are before the Examiner for consideration.

Rejection under 35 U.S.C. §112, second paragraph

Claims 3 and 10 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite. In particular, the Examiner asserts that it is not clear in claim 3 if the edge comprises a substrate of material or the edge and the substrate produce a laminated element of each of the materials or a blend of the materials. In addition, it is not clear to the Examiner if the substrate is an additional layer to the body or edge or if the substrate is a thermoplastic material of the body and edge. Accordingly, the Examiner asserts that the overall structure is not clear.

Regarding the rejection of claim 10, it is asserted that it is not clear if the body surfaces and edges are sides of the main body or if the "at least one side" is an additional surface or edge or body. Further, the Examiner asserts that it is not clear where an adjacent outer region is positioned.

Initially, Applicant submits that claim 3 has been canceled without prejudice, thereby rendering the rejection of this claim moot.

In response to the rejection of claim 10, Applicant has amended claim 10 to recite that the reinforcing edge on at least one side of said main body is formed by compressing one of the left or right edges to form a flange formed of compressed fibers. Additionally, Applicant has removed the phrase "at least one side of said main body". Applicant respectfully submits that as amended, claim 10 is sufficiently definite and respectfully requests that the Examiner reconsider and withdraw this rejection.

Rejection Under 35 U.S.C. §102(b)

Claims 1, 3, 5, and 7-9 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,907,193 to Heller ("Heller"). The Examiner asserts that Heller teaches a plastic sheet material container that is seen as functioning as an acoustic panel. It is further asserted that Heller teaches a container that is joined by fold lines and compressed, with the sheet material between the indentations having a greater density than the density away from the fold lines. In addition, the Examiner asserts that the plastic sheet material may be formed of polystyrene and can be folded on itself to form the container.

Initially, Applicant submits that claim 3 has been canceled without prejudice, thereby rendering the rejection of this claim moot.

In response to the rejection of claims 1, 5, and 7-9, Applicant respectfully directs the Examiner's attention to independent claim 1 and submits that claim 1 defines a decorative acoustic panel that is not taught (or suggested) within Heller. Applicant respectfully submits that Heller does not teach (or suggest) a decorative acoustic panel that includes (1) a main body having a decorative top surface and a bottom surface, where the main body is formed of a first material having a first density and (2) at least one peripheral edge portion positioned at a side of the main body and having a decorative surface, where the peripheral edge portion is formed of compressed first material that extends throughout the peripheral edge portion, where the peripheral edge portion has a second density greater than the first density, where the peripheral edge portion is folded about a fold point such that the peripheral edge portion is flush against the main body, and where the peripheral edge portion is located between the top surface and the bottom surface of the main body.

Applicant notes that in at least one embodiment, Heller teaches the formation of fold lines that are provided with stress relief indentations by heat scoring at opposite faces along the intended fold line. (*See, e.g.*, column 3, lines 41-43; column 6, lines 36-43; and FIG. 2). These relief indentations are created through the compaction and removal of material from the site of scoring. (*See, e.g.*, column 3, line 63 to column 4, line 4 and FIG. 1). It is taught at column 5, lines 46-48 that there is an increase in density at the score line. However, nowhere in Heller is there any teaching (or suggestion) of any compression or compaction of material in the plastic sheet material other than at the fold lines. Indeed, FIG. 1 illustrates the compaction of material between relief indentations 12, 14, but depicts no other compression of the material. There is simply no teaching within Heller of compressing the plastic material to

form a peripheral edge portion that is formed of compressed material extending throughout the peripheral edge portion as claimed in claim 1.

In order for a reference to be anticipatory, each and every element of the claimed invention must be present within the four corners of the cited reference. Because Heller does not teach a peripheral edge portion located between a top surface and a bottom surface of the main body or a peripheral edge portion formed of a compressed first material where the compressed first material extends throughout the peripheral edge portion, Applicant respectfully submits that Heller is not an anticipatory reference. Accordingly, Applicant submits that independent claim 1 is not anticipated by Heller. With respect to dependent claims 5 and 7-9, Applicant submits that because independent claim 1 is not taught (or suggested) within Heller and claims 5 and 7-9 are dependent upon independent claim 1 and contain the same elements as claim 1, dependent claims 5 and 7-9 are also not taught (or suggested) by Heller.

In view of the above, Applicant submits that claims 1, 5, and 7-9 are not anticipated by, or obvious over, Heller and respectfully requests that this rejection be reconsidered and withdrawn.

Rejection Under 35 U.S.C. §103(a)

Claims 6 and 10-12 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 3,907,193 to Heller ("Heller") in view of U.S. Patent No. 3,404,748 to Bjorksten ("Bjorksten"). The Examiner admits that Heller fails to teach an additional second material affixed to the main body (claim 6), a reinforcing edge on a body formed by compressing an outer region to form compressed fibers of the flange (claim 10), or how the flanges are folded (claims 16-19). In this regard, Bjorksten is cited for assertedly teaching a laminate where reinforcing fibers are positioned between two polymer films where the laminate provides thermal insulation, strength, and lightness where folding is required. It is asserted that the laminate includes fibers that are slidable so that they can move into bundles when exposed to stress. It is also asserted that because the fibers are on the opposing sides as well as all over the laminate, and because Bjorksten teaches that the laminate is foldable, it is construed that the teachings of Bjorksten meet the claimed feature of the reinforcing edges having compressed fibers. The Examiner concludes that it would have

been obvious to one of skill in the art to have modified Heller to include a second material and compressed fibers to impart strength to foldable products as cited above.

In response to the rejection of claim 6, Applicant has amended claim 6 to recite that the decorative surface is formed on a veil. It is respectfully submitted that Heller and Bjorksten do not teach or suggest a veil having thereon a decorative surface. Indeed, Heller and Bjorksten are both silent with respect to any teaching or suggestion of a decorated veil, particularly one applied to both a top surface and a peripheral edge portion as claimed in amended claim 6. Accordingly, Applicant respectfully submits that one of skill in the art would have no motivation to arrive at the acoustic panel claimed in claim 6. As such, claim 6 is submitted to be non-obvious and patentable.

In response to the rejection of claims 10-12, Applicant respectfully directs the Examiner's attention to independent claim 10 and submits that claim 10 defines an acoustic panel that is not taught or suggested within Heller and/or Bjorksten. In particular, Applicant respectfully submits neither Heller nor Bjorksten teach or suggest an acoustic panel that includes (1) a main body and (2) a reinforcing edge formed of a rotated flange of compressed fibers where the rotated flange is formed by compressing one of the left or right edges to form the flange of compressed fibers and rotating the flange of compressed fibers until the flange is flush against the main body. Heller is silent with respect to teaching or suggesting a flange formed of compressed fibers. As discussed above, Heller, at most, teaches compressed fibers in the region located between the two stress relief indentations. There is simply no teaching or suggestion within Heller of a compression of material in any of the extending regions or sides to form a flange of compressed material.

Bjorksten teaches laminating a flexible, foldable sheet to a corrugated plastic sheet. (*See, e.g.*, column 1, line 70 to column 2, line 4). In addition, Bjorksten teaches positioning the reinforcing fibers perpendicular to the ridges of the corrugations or flutes. (*See, e.g.*, column 2, lines 27-29). As such, the fibers are permitted to move within or with the film to bunch up and resist tear. (*See, e.g.*, column 2, lines 38-43). It is taught that as long as the fibers can move into bundles when exposed to stress, the fibers and corrugations coact to resist tears. (*See, e.g.*, column 2, lines 49-53). Thus, Applicant submits that Bjorksten teaches bunching the reinforcing fibers to resist tearing the laminate. There is no teaching or suggestion of a flange of compressed fibers or of a reinforced edge formed a rotated flange of compressed fibers. Indeed, Bjorksten is silent with respect to any teaching or suggestion of a

flange of compressed fibers or of a reinforced edge formed of such a flange. Additionally, in claim 10, the flange of compressed material is folded flush against the main body. Such rotation of a flange of compressed material is neither taught nor suggested by either Heller or Bjorksten.

In addition, Applicant submits that there is no motivation for one of skill in the art to arrive at the presently claimed invention based on the teachings of Heller and Bjorksten. To establish a *prima facie* case of obviousness, there must be some motivation, either within the reference or in the knowledge of those of skill in the art, to modify the reference or combine the references' teachings, there must be a reasonable expectation of success, and the prior art references must meet all of the claim limitations. (*See, e.g., Manual of Patent Examining Procedure*, Patent Publishing, LLC, Eighth Ed., Rev. 3, August 2005, §2142). Applicant respectfully submits that one of ordinary skill in the art would not be motivated to arrive at the acoustic panel claimed in claim 10 that includes (1) a main body having a front surface, an opposing back surface, a left edge, and a right edge and (2) a reinforcing edge formed of a rotated flange of compressed fibers where the rotated flange is formed by compressing one of the left or right edges to form the flange of compressed fibers and rotating the flange of compressed fibers until the flange is flush against the main body. As discussed above, neither Heller nor Bjorksten teach or suggest a flange formed of compressed fibers that is flush against the main body. In fact, Heller and Bjorksten are silent with respect to any teaching or suggestion of the compression of fibers to form a flange of compressed fibers as required by claim 10. Without some teaching or suggestion, there can be no motivation, and without motivation, there can be no *prima facie* case of obviousness. Additionally, Applicant submits that, in view of the above, the combination of the teachings of Heller and Bjorksten would not result in the acoustic panel claimed in claim 10.

In view of the above, Applicant respectfully submits that amended claims 6 and 10 are patentably distinguishable over Heller and Bjorksten, either alone or in combination. With respect to claims 11 and 12, it is submitted that because claims 11 and 12 are dependent upon independent claim 10, which is not taught or suggested within Heller and/or Bjorksten and because claims 11 and 12 contain the same elements as claim 10, claims 11 and 12 are also non-obvious and patentable. Accordingly, Applicant respectfully submits that claims 6 and 10-12 are not obvious over Heller in view of Bjorksten and respectfully requests reconsideration and withdrawal of this rejection.

Rejection Under 35 U.S.C. §103(a)

Claims 13-19 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 3,907,193 to Heller ("Heller") in view of U.S. Patent No. 3,404,748 to Bjorksten ("Bjorksten"), and further in view of U.S. Patent No. 3,835,604 to Hoffmann, Jr. ("Hoffmann"). The Examiner admits that Heller fails to teach decoration. In this regard, Hoffmann is cited for assertedly teaching a folded facing and insulation panel where the facing sheet has a decorative pattern such as indicia so that the installed appearance of the insulation is aesthetic or attractive. The Examiner concludes that it would have been obvious to one of skill in the art to have modified a panel formed by the combination of Heller and Bjorksten to include decoration for aesthetic appearances. In addition, the Examiner concludes that it would have been obvious to one of skill in the art to extend the decoration throughout the entire body to make the panel more attractive.

In response to this rejection, Applicant respectfully directs the Examiner's attention to independent claim 10 and to the arguments set forth above with respect to the rejection of claims 6 and 10-12 under 35 U.S.C. §103(a) to Heller in view of Bjorksten and submits that claim 10 defines an acoustic panel that is not taught or suggested within Heller and Bjorksten. In addition, Applicant submits that the teachings of Hoffmann do not add to the Examiner's rejection so as to make claim 10 unpatentable. Even with the addition of the teachings of Hoffmann, Heller and Bjorksten still do not teach or suggest an acoustic panel that includes (1) a main body and (2) a reinforcing edge formed of a rotated flange of compressed fibers where the rotated flange is formed by compressing one of the left or right edges to form the flange of compressed fibers and rotating the flange of compressed fibers until the flange is flush against the main body as claimed in amended claim 10. As such, it is submitted that the combination of Heller, Bjorksten, and Hoffmann does not teach or suggest Applicant's invention as recited in claim 10. Because claims 13-19 are dependent upon claim 10, which, as discussed in detail above, is not taught or suggested by Heller, Bjorksten, and Hoffmann, Applicant submits that claims 13-19 are also not taught or suggested by Heller, Bjorksten, and/or Hoffmann.

In view of the above, Applicant respectfully submits that claims 13-19 are non-obvious and patentable over the combination of Heller, Bjorksten, and Hoffmann and respectfully requests that this rejection be reconsidered and withdrawn.

Rejection Under 35 U.S.C. §103(a)

Claims 4 and 14 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 3,907,193 to Heller ("Heller") in view of U.S. Patent No. 3,404,748 to Bjorksten ("Bjorksten"), and further in view of U.S. Patent No. 3,835,604 to Hoffmann, Jr. ("Hoffmann") and U.S. Patent No. 4,946,738 to Chenoweth, *et al.* ("Chenoweth"). The Examiner admits that Heller, Bjorksten, and Hoffmann do not teach using bicomponent fibers. In this regard, Chenoweth is cited for assertedly teaching a nonwoven material that includes a matrix of glass fibers, solid or hollow homogenous synthetic fibers, and bicomponent synthetic fibers that have been intimately combined with a thermosetting resin into a homogenous mixture. It is asserted that the mixture is dispersed to form a blanket and melted to be formed into complexly curved and shaped configurations. The Examiner concludes that it would have been obvious to one of skill in the art to have modified a panel formed by the combination of Heller, Bjorksten and Hoffmann to include bicomponent polyester fibers for the purpose of forming curved and shaped configurations.

In response to this rejection, Applicant respectfully directs the Examiner's attention to independent claims 1 and 10 and submits that claim 1 defines a decorative acoustic panel and claim 10 defines an acoustic panel that are not taught within Heller, Bjorksten, Hoffmann, and/or Chenoweth. Specifically, Applicant respectfully submits that none of Heller, Bjorksten, Hoffmann, and Chenoweth teach or suggest (1) a main body having a decorative top surface and a bottom surface, where the main body is formed of a first material having a first density and (2) at least one peripheral edge portion positioned at a side of the main body and having a decorative surface, where the peripheral edge portion is formed of compressed first material extending throughout the peripheral edge portion, where the peripheral edge portion has a second density that is greater than the first density, where the peripheral edge portion is folded about a fold point such that the peripheral edge portion is flush against the main body, and where the peripheral edge portion is located between the top surface and the bottom surface of the main body (claim 1) or an acoustic panel that includes a main body and a reinforcing edge formed of a rotated flange of compressed fibers where the rotated flange is formed by compressing one of the left or right edges to form the flange of compressed fibers and rotating the flange of compressed fibers until the flange is flush against the main body (claim 10).

Turning first to claim 1, Applicant respectfully submits that Heller teaches the formation of fold lines that are provided with stress relief indentations by heat scoring at opposite faces along the intended fold line. (*See, e.g.*, column 3, lines 41-43; column 6, lines 36-43; and FIG. 2). These relief indentations are created through the compaction and removal of material from the site of scoring. (*See, e.g.*, column 3, line 63 to column 4, line 4 and FIG. 1). Heller teaches at column 5, lines 46-48 that there is an increase in density at the score line. However, there is no teaching or suggestion anywhere in Heller of any compression or compaction of material other than at the fold lines. Indeed, FIG. 1 illustrates the compaction of material between relief indentions 12, 14, but does not illustrate other compression areas of the material. There is simply no teaching or suggestion within Heller of compressing the plastic material to form a peripheral edge portion formed of compressed material that extends throughout the peripheral edge portion as claimed in claim 1. At most, Heller teaches the compaction of material in the area between the relief indentations.

Bjorksten teaches laminating a flexible foldable sheet to a corrugated plastic sheet. (*See, e.g.*, column 1, line 70 to column 2, line 4). In addition, Bjorksten teaches the positioning of reinforcing fibers perpendicular to the ridges of the corrugations or flutes. (*See, e.g.*, column 2, lines 27-29). As such, the fibers are permitted to move within or with the film to bunch up and resist tear. (*See, e.g.*, column 2, lines 38-43). It is taught that as long as the fibers can move into bundles when exposed to stress, the fibers and corrugations coact to resist tears. (*See, e.g.*, column 2, lines 49-53). Applicant respectfully submits that Bjorksten teaches bunching the reinforcing fibers to resist tearing the laminate, and does not teach or suggest at least one peripheral edge portion formed of compressed said first material extending throughout said at least one peripheral edge portion and positioned at a side of the main body as is required by claim 1.

Hoffmann teaches folding outer edge portions (*i.e.*, lip areas) of the facing sheet down and under the adjacent portion of the sheet along fold lines (*see, e.g.*, column 3, lines 11-17 and column 4, lines 30-36), but does not teach or suggest compressing these edge portions or "lip areas". Chenoweth is silent with respect to any teaching or suggestion of the formation of a compressed region, and thus cannot make up for the deficiencies of Heller, Bjorksten, or Hoffmann. It is therefore submitted that the combination of Heller, Bjorksten, Hoffmann, and Chenoweth would not result in the inventive acoustic panel claimed in claim 1. Accordingly, it is respectfully submitted that claim 1 is non-obvious and patentable.

With respect to claim 10, it is respectfully submitted that Heller, Bjorksten, Hoffmann, and Chenoweth do not teach or suggest a reinforcing edge formed of a rotated flange of compressed fibers where the flange is flush against the main body. As discussed above, Bjorksten teaches laminating a flexible foldable sheet to a corrugated plastic sheet and positioning reinforcing fibers perpendicular to the ridges of the corrugations or flutes. (*See, e.g.*, column 1, line 70 to column 2, line 4 and column 2, lines 27-29). As such, the fibers are permitted to move within or with the film to bunch up and resist tear. (*See, e.g.*, column 2, lines 38-43). Bjorksten teaches that as long as the fibers can move into bundles when exposed to stress, the fibers and corrugations coact to resist tears. (*See, e.g.*, column 2, lines 49-53). Thus, Bjorksten teaches bunching the reinforcing fibers to resist tearing the laminate. There is simply no teaching or suggestion within Bjorksten of a flange of compressed fibers or of a reinforced edge formed of a rotated flange of compressed fibers. Indeed, Bjorksten is silent with respect to any teaching or suggestion of a flange of compressed fibers or of a reinforced edge formed of such a flange. Heller, Hoffmann, and Chenoweth are silent with respect to teaching or suggesting any compression of fibers, particularly compressing fibers to form a flange of compressed fibers as is required by claim 10. Therefore, it is respectfully submitted that Heller, Bjorksten, Hoffmann, and Chenoweth do not teach or suggest the acoustic panel claimed in amended claim 10.

In addition, Applicant submits that there is no motivation for one of skill in the art to arrive at the presently claimed inventions based on the teachings of Heller, Bjorksten, Hoffmann, and Chenoweth. As discussed above, to establish a *prima facie* case of obviousness, there must be some motivation, either within the reference or in the knowledge of those of skill in the art, to modify the reference or combine the references' teachings, there must be a reasonable expectation of success, and the prior art references must meet all of the claim limitations. (*See, e.g., Manual of Patent Examining Procedure*, Patent Publishing, LLC, Eighth Ed., Rev. 3, August 2005, §2142). Applicant respectfully submits that one of ordinary skill in the art simply would not be motivated to arrive at the acoustic panels claimed in claims 1 or 10 based on the teachings of the Examiner's cited references.

As discussed above, none of Heller, Bjorksten, Hoffmann, or Chenoweth teaches or suggests the peripheral edge portion formed of a compressed first material that extends throughout the peripheral edge portion as claimed in claim 1 or the reinforced edge formed of a rotated flange of compressed fibers of claim 10. Bjorksten teaches bunching the reinforcing

fibers to resist tearing the laminate. There is simply no teaching or suggestion within Bjorksten of a flange of compressed fibers or of a reinforced edge formed of a rotated flange of compressed fibers. Indeed, Heller, Hoffmann, and Chenoweth are completely silent with respect to any teaching or suggestion of the formation of compressed regions. In addition, none of the cited references teach or suggest a peripheral edge portion that is located between a top surface and a bottom surface of a main body as required by claim 1. Without some teaching or suggestion, there can be no motivation, and without motivation, there can be no *prima facie* case of obviousness. Further, Applicant submits that, in view of the above, it is respectfully submitted that the combination of the teachings of Heller, Bjorksten, Hoffmann, and Chenoweth would not result in the inventions claimed in amended claims 1 and 10.

In view of the above, Applicant respectfully submits that amended claims 1 and 10 are patentably distinguishable over Heller, Bjorksten, Hoffmann, and Chenoweth, either alone or in any combination. Because claims 4 and 14 are dependent upon independent claim 1 and claim 10 respectively, which are not taught or suggested by Heller, Bjorksten, Hoffmann, or Chenoweth, and because claims 4 and 14 contain the same elements as the claim from which they depend, claims 4 and 14 are also submitted to be non-obvious and patentable. Accordingly, Applicant respectfully submits that claims 4 and 14 are not obvious over Heller in view of Bjorksten, Hoffmann, and Chenoweth and respectfully requests that this rejection be reconsidered and withdrawn.

Conclusion

In light of the above, Applicant believes that this application is now in condition for allowance and therefore requests favorable consideration.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

If necessary, the Commissioner is hereby authorized to charge payment or credit any overpayment to Deposit Account No. 50-0568 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

Date: July 1, 2008

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